

LICENSE AGREEMENT

AGREEMENT made as of the 30th day of September, 1992 ("Effective Date") by and between LIGAND PHARMACEUTICALS INCORPORATED ("Ligand"), a corporation organized and existing under the laws of the State of Delaware, having a principal place of business at 9393 Towne Centre Drive, San Diego, California 92121, and THE ROCKEFELLER UNIVERSITY ("Rockefeller"), a nonprofit education corporation organized and existing under the laws of the State of New York, having an office at 1230 York Avenue, New York, New York 10021.

W I T N E S S E T H:

WHEREAS, Dr. James Darnell and his colleagues at Rockefeller and at NYU have developed valuable technology and know-how relating to peptidyl hormone mediated gene expression, including application for patents thereon, which constitutes core technology to be licensed hereunder;

WHEREAS, NYU has assigned to Rockefeller its rights to the core technology;

WHEREAS, Rockefeller has the right to grant exclusive license rights with respect to such core technology and to future developments relating thereto made at Rockefeller in the manner described herein; and

WHEREAS, Ligand wishes to obtain the exclusive license rights described herein for commercial development and application;

NOW, THEREFORE, in consideration of the mutual benefits to be derived hereunder, the parties hereto agree as follows:

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1. Definitions

The following terms will have the meanings assigned to them below when used in this Agreement.

1.1 "Party" shall mean either Ligand or Rockefeller and "Parties" shall mean Ligand and Rockefeller.

1.2 "Affiliate" shall mean a corporation or other entity which directly or indirectly controls, is controlled by or under common control with Ligand. An entity shall be regarded as in control of another if it owns, or directly or indirectly controls, at least 50% of the voting stock or other ownership interest of the other entity, or if it directly or indirectly possesses the power to direct or cause the direction of the management and policies of the other entity by any means whatsoever.

1.3 "Licensed Patent Rights" shall mean

(a) the patent application(s) set forth on Exhibit "A" attached hereto and all patents which may issue thereon;

(b) the patent applications which are divisionals, continuations, continuations-in-part, reissues, renewals, foreign counterparts, extensions or additions of the patents and/or applications described in (a) and (b) of this paragraph 1.3, and all patents which may issue thereon;

(c) and all other patent applications, and patents issuing thereon, filed to cover Technical Information, including divisionals, continuations-in-part, reissues, renewals, foreign counterparts, extensions or additions and patents which may issue thereon.

1.4 "Technical Information" shall mean any and all technical data, information processes, materials and know-how,

whether or not patentable, owned by Rockefeller and existing or capable of description in a tangible form relating to peptidyl hormone mediated gene expression (a) developed in the laboratory of Dr. James Darnell of Rockefeller or Dr. David Levy of NYU as of the Effective Date and (b) which is subsequently developed at Rockefeller in the laboratory of Dr. James Darnell during the period ending five (5) years from the Effective Date.

1.5 "Product" shall mean any product which embodies or the use of which employs any invention(s) described or claimed in Licensed Patent Rights or for which Technical Information was essential to the discovery or development thereof.

1.6 "Process" shall mean any process which embodies or the practice of which employs any invention(s) described or claimed in Licensed Patent Rights or for which Technical Information was essential to the discovery or development thereof.

1.7 "Territory" shall mean the entire world.

1.8 "Net Sales" shall mean, in the case of sales to non-Affiliates, the invoiced price by Ligand or Affiliates less (a) customary trade quantity and cash discounts actually allowed and taken; (b) allowances actually given for returned, rejected or recalled Products; actual charges for bad debts; (c) freight and insurance if included in the price; government mandated rebates; and (d) value added tax, sales, use or turnover taxes, excise taxes, and custom duties included in the invoiced price.

2. License Rights

2.1 Rockefeller hereby grants to Ligand a sole exclusive license, including the right to grant royalty bearing sublicenses under terms consistent with this Agreement under Licensed Patent Rights and Technical Information, to make, have made, use and sell Products or practice Processes in any country of

the Territory, except to the extent that Rockefeller's right to do so may be limited under the provisions of the following:

(a) 35 United States, Section 201 et seq., and regulations and rules promulgated thereunder, or

(b) other applicable laws or regulations of the United States;

Provided only that Rockefeller is satisfied that the licensee is making a substantial and good faith effort to achieve practical application of the subject invention and its public use, Rockefeller agrees to use reasonable and proper efforts to extend exclusivity of the license consistent with the aforesaid U.S. government rights and policies should U.S. government action limit such exclusivity.

2.2 In consideration of the Ligand stock to be issued to Rockefeller and NYU as described in Section 2.3 and the cash payments to be made pursuant to Section 2.3, the license to Ligand under Section 2.1 shall be deemed to be fully paid up for research purposes including for the purposes of research done by Ligand or a Ligand sublicensee or collaboratively with a third party to the extent that the third party payments to Ligand do not exceed its fully burdened costs for performance of such research and development.

2.3 On the Effective Date, Ligand shall transfer to Rockefeller and NYU collectively a total of 150,000 shares of Series G Preferred Stock pursuant to Stock Transfer Agreements of even date herewith, 100,000 shares of which will vest on the Effective Date and 50,000 shares of which will vest in two installments of 25,000 shares on the first and second anniversaries hereof unless this Agreement is sooner terminated as provided herein. On the Effective Date, Ligand will also grant Rockefeller and NYU collectively, five year, net issuance warrants to purchase

a total of 100,000 shares of Ligand common stock vesting and exercisable as follows:

(i) a total of 50,000 shares vesting at the third anniversary of the Effective Date and exercisable at \$14.00 per share; and

(ii) a total of 50,000 shares vesting at the fourth anniversary of the Effective Date exercisable at the fair market value on the vesting date.

As further consideration, Ligand will make cash payments to Rockefeller and NYU pursuant to the following schedule:

(a) On the Effective Date;

Rockefeller	\$45,000
NYU	\$ 5,000

(b) \$67,500 to Rockefeller and \$7,500 to NYU when the current Technical Information is successfully transferred to Ligand as described in Section 5;

(c) \$67,500 to Rockefeller and \$7,500 to NYU on each of the 1st - 4th anniversaries of the Effective Date.

2.4 Ligand will pay a royalty of five percent (5%) of its Net Sales of Products and on its net revenues, i.e., gross revenues less fully burdened costs, received from performance of Processes for a third party. The royalty shall be paid for a term which is the longer of ten (10) years or, on a country by country basis, expiration of the last patent in the Licensed Patent Rights having a claim which reads on the Product or Process or a method of making or using the Product or Process. Only one royalty will be owed on a Product or Process in the circumstance where the Product or Process is covered by multiple claims in the Licensed Patent Rights. Royalty payments made under this Section 2.4 and under

Section 2.5 shall be made to Rockefeller and NYU in the ratio ninety percent (90%) to Rockefeller and ten percent (10%) to NYU.

2.5 In the case of payments made to Ligand by a third party to secure the right to use Technical Information or to sell Products or Processes, Ligand will pay to Rockefeller and NYU twenty-five percent (25%) of the payments made to Ligand by the third party; provided, however, that in the situation where the payment to Ligand is based on the third party's revenues arising from sale of a Product or use of a Process, then Ligand shall pay to Rockefeller and NYU the lesser of twenty-five percent (25%) of the payment received from the third party or a royalty calculated pursuant to Section 2.4 by treating the third party's sales of such Products and Processes as Ligand sales. Payments by a third party to Ligand to purchase equity in Ligand and to fund research at Ligand which do not generate net revenue as defined in Section 2.4 shall not be subject to sharing under this Section 2.5.

2.6 In the event Ligand is required to make payments to a third party to use Technical Information, it shall be entitled to credit fifty percent (50%) of that payment against any royalty owed under this Agreement but in no event may it reduce a payment owed by more than fifty percent (50%).

2.7 Ligand will diligently seek to develop Products and/or Processes using or based on Technical Information. Ligand shall be deemed to have met its diligence obligations during the first five (5) years of the Agreement if, in the aggregate, Ligand, its Affiliates, licensees and research collaborators expend at least \$4,000,000 directed toward the development of Products and Processes and support at least ten (10) full time scientist equivalents in support of that effort.

3. Patents

3.1 The Company agrees to reimburse Rockefeller for all amounts expended prior to the date hereof for the preparation, filing, prosecution and maintenance of Licensed Patent Rights licensed to the Company pursuant to Section 2.1 of this Agreement, said amount being \$20,791.18 as of September 8, 1992.

3.2 The Company shall continue to reimburse Rockefeller for such reasonable additional filing, prosecution, and maintenance costs as shall be incurred on each such patent application or patent licensed hereunder during the term of such license.

3.3 Rockefeller shall select qualified independent patent counsel reasonably satisfactory to Ligand to file and prosecute all patent applications included in Licensed Patent Rights, including divisionals, continuations, continuations-in-part, reissues, and foreign counterparts. Such counsel shall regularly meet and/or consult with Ligand and/or its designated officers and counsel to keep them advised of the status of patent matters in the normal course. Patent counsel shall be instructed not to file any papers without giving Ligand ample time and opportunity to review and comment. Ligand shall be entitled to determine the countries in which it wishes to obtain and maintain patent protection under this Agreement and shall be free, at any time and at its sole option, to abandon patent prosecution or maintenance in any country of the Territory.

3.4 Ligand shall promptly advise Rockefeller of any decision not to finance the preparation, filing, prosecution or maintenance of any patent application or patent licensed hereunder in adequate time to allow Rockefeller, at its own cost, to effectuate such preparation, filing, prosecution, or maintenance if it desires to do so; and Ligand shall, at the request of Rockefeller, take whatever steps may be necessary to return to Rockefeller all rights which Ligand may have with respect to the

applicable Licensed Patent Rights and Technical Information which it proposes to abandon.

Nothing herein is intended or shall be construed as obligating Rockefeller to apply for any U.S. or foreign patents at its own expense, or to defend, enforce, or support any patent or patent application which may be included in Licensed Patent Rights to which it has granted license rights to Ligand; provided, however, that Rockefeller will cooperate with Ligand in Ligand's activity in applying for U.S. or foreign patents or in the defense or enforcement of Licensed Patent Rights.

Nothing herein is intended or shall be construed as obligating Ligand to maintain its license with respect to any patent or application licensed hereunder and to finance the preparation, filing, prosecution or maintenance of any patent application in any bounty or jurisdiction in which it believes it is not in the best business interests.

3.5 Ligand shall have the right to institute patent infringement proceedings against third parties based on any Licensed Patent Rights licensed hereunder. If Ligand does not institute infringement proceedings against such third parties, Rockefeller shall have the right but not the obligation, to institute such proceedings. Within thirty (30) days after notice of its intention to commence such proceedings given to Ligand and provided that Ligand does not, within such thirty (3) day period, institutes its own proceedings, Rockefeller may institute such proceedings. The expenses of such proceedings, including lawyers' fees, shall be borne by the Party instituting suit. Each Party shall execute all necessary and proper documents and take all other appropriate action to allow the other Party to institute and prosecution such proceedings. Any award paid by third parties as a result of such proceedings (whether by way of settlement or otherwise) shall first be applied toward reimbursement for the legal fees and expenses incurred, and the excess, if any, shall be

shared on a pro rata basis based on the expenses incurred by each party.

3.6 Should Ligand decide at any time during the term hereof that it will no longer commercially pursue the development of any invention licensed hereunder, Ligand shall promptly notify Rockefeller of its decision and, upon request from Rockefeller, shall take whatever steps are necessary to assure reversion to Rockefeller of all rights to that invention.

3.7 Ligand shall assume the responsibility at its own expense, and using counsel of its choosing, to defend against claims of patent infringement arising from the making, using, or selling of Products and Processes.

4. Payments and Reports

4.1 Within forty-five (45) days of the end of each calendar quarter during the term of this Agreement, beginning with the first quarter in which the obligation to make a payment to Rockefeller arises, Ligand shall submit to Rockefeller and NYU a report in writing setting forth the net revenues (revenues less Fully Burdened Costs) earned from the performance of a Process and the Net Sales of Products, and payments to Ligand which are subject to sharing with Rockefeller and NYU. The report shall include a calculation of the payments owed to Rockefeller and NYU arising therefrom and shall be accompanied by payment to Rockefeller and NYU in the full amount thereof.

4.2 Ligand shall keep adequate records in sufficient detail to enable the payments due from Ligand hereunder to Rockefeller and NYU to be determined, and permit said records to be inspected at any time during regular business hours at its principal place of business by an independent certified public accountant appointed by Rockefeller, or Rockefeller and NYU together but not NYU alone, for this purpose and who is reasonably

acceptable to Ligand. The accountant shall be required to enter into a confidentiality agreement with Ligand substantially in the form of the provisions contained in Article 5 herein and shall only report to Rockefeller, and NYU if a joint audit is done, the discrepancy, if any, between the amount owed by Ligand for the audited period and the amount actually paid and discrepancies in the method of calculating Fully Burdened Costs. Ligand shall maintain such records for a minimum of three years. No more than one such audit shall be requested per calendar year. Rockefeller, or Rockefeller and NYU if a joint audit, shall bear the cost of any such audit; provided, however, that where the auditor determines that the payments owed for an audit period exceeds that paid to Rockefeller and NYU by Ligand by more than ten (10) percent, the reasonable cost of the audit shall be borne by Ligand.

5. Technical Information Transfer

Rockefeller will diligently cooperate with Ligand to transfer Technical Information to Ligand. Transfer of current Technical Information will be deemed to have successfully occurred for the purposes of Section 2.3 when Rockefeller has transferred to Ligand, and Ligand has successfully expressed, functional proteins from the clones of the genes specifically described in the applications for United States Patents identified in Exhibit "A".

6. Confidentiality

6.1 The Parties contemplate that during the course of their relationship arising under this Agreement it may be necessary to provide the other with confidential information to facilitate the performance of their obligations pursuant to this Agreement. The Parties agree, therefore, that information received from the other which is in writing and identified as confidential, or if disclosed orally, is confirmed in writing and designated confidential, shall be maintained in confidence and that reasonable

and prudent practices shall be followed to maintain the information in confidence, including, where necessary, obtaining written confidentiality agreements from employees not already bound by such agreements who have access to the confidential information. Information received in confidence shall be used by a party only for the purpose of and in connection with its performance of this Agreement. The obligation to maintain information in confidence shall survive this Agreement or termination thereof for any reason for a period of five (5) years thereafter. However, a party shall not be obliged to maintain information in confidence which it can show by written documentation: (a) to have been publicly known prior to submission to it; (b) to have been known or available to it prior to submission by the other party; (c) to have become publicly known without fault on its part subsequent to submission by the other party; (d) to have been received by it from a third party legally having possession of the information without obligations of confidentiality; (e) to be required to be disclosed pursuant to order of any court or governmental agency having jurisdiction thereof after notice to the other party sufficient to afford it an opportunity to intervene in the proceeding where disclosure is required; and (f) to be necessarily revealed in the course of marketing any Product or Process which is licensed hereunder.

7. Academic Freedom

Rockefeller and Ligand recognize the traditional freedom of all scientists to publish and present promptly the results of their research. Rockefeller and Ligand also recognize that exclusive patent rights can be jeopardized by public disclosure prior to the filing of suitable patent applications. Therefore, Rockefeller will assure that each proposed publication concerning any technology described in Licensed Patent Rights or which may constitute an Improvement thereof, before submission to a publisher, will be submitted to Ligand for review in connection with preservation of exclusive patent rights. Ligand shall have

thirty (30) days in which to review the publication, which may be extended for an additional thirty (30) days when Ligand provides substantial and reasonable need for such extension. By mutual agreement, this period may be further extended for not more than an additional three (3) months. Ligand will allow for simultaneous submission of the publication to the publisher and Ligand, where appropriate. Any publication by Ligand personnel will also be subject to similar pre-review before publication. Scientists at Rockefeller and Ligand will be expected to treat matters of authorship in a proper collaborative spirit, giving credit where it is due and proceeding in a manner which fosters cooperation and communication.

8. Warranty

8.1 Rockefeller warrants that it has the right to grant to the full extent thereof the license granted Ligand hereunder and that it has and will discharge their duty of disclosure to the United States Patent and Trademark Office.

8.2 EXCEPT AS WARRANTED IN THE PRIOR SECTION 8.01, ROCKEFELLER MAKES NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING ANY EXPRESS OR IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE.

9. Publicity

Ligand will not use directly or by implication the name of Rockefeller, or the name of any member of the faculty or staff of Rockefeller, or any unpublished information or data relating to the investigation for any business, promotional, commercial or other purpose, without the prior written approval of Rockefeller and the faculty or staff member involved; except Ligand may use and disclose such names in its internal communications or in any required governmental reports and filings upon prior disclosure and consultation with Rockefeller, as appropriate.

10. Product Liability

Ligand agrees to indemnify and hold harmless Rockefeller, its trustees, officers, agents, faculty, employees, and students from any and all liability arising from injury or damage to persons or property resulting directly or indirectly from Ligand's acquisition, use, manufacture, or sale of any Product covered by Licensed Patent Rights or Technical Information licensed hereunder. Ligand further agrees, so long as it is selling any Product, to obtain and maintain in force product liability insurance coverage in amounts reasonably satisfactory to Rockefeller, as appropriate to the risk as determined by reference to reliable standards in the industry, such insurance to specifically name Rockefeller as an additional insured.

11. Termination

11.1 The licenses herein granted shall continue for the full term of any patents licensed hereunder as the same or the effectiveness thereof may be extended by any governmental authority, rule or regulation applicable thereto.

11.2 Ligand shall have the right to terminate any license grant at any time upon ninety (90) days' prior written notice to Rockefeller, provided, however, that termination shall not affect Rockefeller's and NYU's rights and privileges as a stockholder of Ligand or their ownership of any vested shares of Ligand.

11.3 Any Party may terminate this Agreement in the event of a material breach by the other party, provided only that the offending Party is given notice of the breach and a reasonable time, not to exceed sixty (60) days, in which to cure such breach.

11.4 Any termination of this Agreement and of any option and/or license granted hereunder shall also terminate any applicable sublicense thereunder.

11.5 The Parties acknowledge that Ligand's right to the future developments made at Rockefeller in the laboratory of Dr. James Darnell are an important element of this Agreement. Therefore, in the event that Dr. Darnell for health reasons or otherwise ceases to actively conduct research at Rockefeller as a full time member of the faculty, then Ligand can, without loss of rights under the Agreement, terminate the making of anniversary cash payments under Section 2.3.

12. Notices

Any notice required to be given pursuant to this Agreement shall be made by personal delivery or, if by mail, then by registered or certified mail, return receipt requested, with postage and fees prepaid, by one Party to the other Party at the addresses noted below.

In the case of Ligand, notice should be sent to:

Ligand Pharmaceuticals Incorporated
9393 Towne Centre Drive, Suite 100
San Diego, CA 92121
Attn: General Counsel

In the case of Rockefeller, notice should be sent to:

The Rockefeller University
1230 York Avenue
New York, NY 10021
Attn: Office of the General Counsel

13. Law to Govern

This Agreement shall be interpreted and governed in accordance with the laws of the State of New York.

14. No Partnership

This Agreement shall not constitute a partnership or a joint venture, and neither Party may be bound by the other to any

contract, arrangement or understanding except as specifically stated herein.

15. No Waiver

The failure of either party to enforce at any time any of the provisions of this Agreement, or any rights in respect thereto, or to exercise any election herein provided, shall in no way be considered to be a waiver of such provisions, rights or elections, or in any way to affect the validity of this Agreement. Exercise by either party any of its rights herein or any of its elections under the terms or covenants herein shall not preclude either party from exercising the same or any other rights in this Agreement, irrespective of any previous action or proceeding taken by either party hereunder.

16. Severability

If any provision of this Agreement is judicially determined to be void or unenforceable, such provision shall be deemed to be severable from the other provisions of this Agreement which shall remain in full force and effect. Either Party may request that a provision otherwise void or unenforceable be reformed so as to be valid and enforceable to the maximum extent permitted by law.

17. Assignment

This Agreement may not be assigned by either Party without the prior written consent of the other, which consent shall

not be unreasonably withheld except that Ligand may assign this Agreement to a successor entity in the case of a merger, acquisition or other reorganization.

18. Resolution of Dispute

The Parties agree that in the event of a dispute between them arising from concerning, or in any way relating to this Agreement, the Parties shall undertake good faith efforts to resolve the same amicably between themselves.

19. Force Majeure

The Parties shall not be liable in any manner for failure or delay in fulfillment of all or party of this Agreement, directly or indirectly caused by acts of God, governmental orders or restrictions, war, war-like condition, revolution, riot, looting, strike, lockout, fire, flood or other similar or dissimilar causes or circumstances beyond the non-performing Party's control. The non-performing Party shall promptly notify the other Party of the cause or circumstance and shall recommence its performance of its obligations as soon as practicable after the cause or circumstance ceases.

20. Entire Understanding

This Agreement, together with the Exhibits hereto, and the further documents and agreements executed in connection with the transactions contemplated hereby constitute the entire agreement between the Parties and supersedes all prior

understandings and agreements by the Parties with respect to the subject matter hereof.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed as of the day and year first above written.

THE ROCKEFELLER UNIVERSITY

By Torsten Winkel

Title President

LIGAND PHARMACEUTICALS
INCORPORATED

By Daniel E. Bahn

Title President and CEO

EXHIBIT "A"

U. S. PATENT APPLICATIONS

1. TITLE: "RECEPTOR RECOGNITION FACTOR AND METHODS OF USE THEREOF"
INVENTORS: Darnell and Levy
SERIAL NO.: 07/613,326
FILED: November 14, 1990

2. TITLE: "RECEPTOR RECOGNITION FACTORS, PROTEIN SEQUENCES AND METHODS OF USE THEREOF"
INVENTORS: Darnell, Schindler and Fu
SERIAL NO.: 07/854,296
FILED: March 19, 1992